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| APPLICATION NO.                | FILING DATE   | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.             | CONFIRMATION NO |  |
|--------------------------------|---------------|----------------------|---------------------------------|-----------------|--|
| 09/662,181                     | 09/14/2000    | Richard J. McCurdy   | L10389                          | 2443            |  |
| 75                             | 90 01/30/2004 |                      | EXAMINER                        |                 |  |
| Philip S Oberlin               |               |                      | CHEN, BRET P                    |                 |  |
| Marshall & Mel Four Seagate Ei |               |                      | ART UNIT PAPER NUMBER           |                 |  |
| Toledo, OH 43                  |               |                      | 1762<br>DATE MAILED: 01/30/2004 |                 |  |
|                                |               |                      |                                 |                 |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

| ^ .   | Application No.   | Applicant(s)  |  |
|---|---|---|--|
| Advisory Action   | 09/662,181  | MCCURDY ET AL.  |  |
| navicely nation   | Examiner  | Art Unit  |  |
|   | B. Chen   | 1762  |  |
| The MAILING DATE of this communication appe   | ars on the cover sheet with the c   | orrespondence add   | ress   |
| THE REPLY FILED FAILS TO PLACE THIS APPR<br>Therefore, further action by the applicant is required to a<br>final rejection under 37 CFR 1.113 may only be either: (1<br>condition for allowance; (2) a timely filed Notice of Appea<br>Examination (RCE) in compliance with 37 CFR 1.114.   | ) a timely filed amendment whi  | cation. A proper rep<br>ch places the applic  | cation in  |
| PERIOD FOR RE   | PLY [check either a) or b)]   |   |  |
| a) The period for reply expires 3 months from the mailing date of b) The period for reply expires on: (1) the mailing date of this Adv event, however, will the statutory period for reply expire later the ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS 706.07(f).  Extensions of time may be obtained under 37 CFR 1.136(a). The dat have been filed is the date for purposes of determining the period of extens 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened (b) above, if checked. Any reply received by the Office later than three mo earned patent term adjustment. See 37 CFR 1.704(b). | isory Action, or (2) the date set forth in the an SIX MONTHS from the mailing date of FILED WITHIN TWO MONTHS OF THE see on which the petition under 37 CFR 1.1 sion and the corresponding amount of the statutory period for reply originally set in | the final rejection. FINAL REJECTION. S 36(a) and the appropriate fee. The appropriate extending of the final Office action; or | See MPEP e extension fee tension fee under (2) as set forth in |
| 1. A Notice of Appeal was filed on Appellant's 37 CFR 1.192(a), or any extension thereof (37 CFI  |   |   |  |
| 2. The proposed amendment(s) will not be entered be   | ecause:   |   |  |
| (a) they raise new issues that would require further  | er consideration and/or search (  | see NOTE below);  |  |
| (b) they raise the issue of new matter (see Note b  | pelow);   |   |  |
| <ul><li>(c) they are not deemed to place the application i<br/>issues for appeal; and/or</li></ul>  | n better form for appeal by mat   | erially reducing or s   | simplifying the  |
| (d) they present additional claims without cancel NOTE:   | ing a corresponding number of t   | finally rejected clair  | ns.  |
| 3. Applicant's reply has overcome the following reject  | tion(s):  |   |  |
| 4. Newly proposed or amended claim(s) would canceling the non-allowable claim(s).   | be allowable if submitted in a s  | eparate, timely filed   | d amendment  |
| 5. ☑ The a) ☐ affidavit, b) ☐ exhibit, or c) ☑ request for application in condition for allowance because: of   | r reconsideration has been cons<br>the reasons listed on the following p  | idered but does NC<br>pages.  | OT place the   |
| 6. The affidavit or exhibit will NOT be considered becaused by the Examiner in the final rejection.   | cause it is not directed SOLELY   | to issues which we  | re newly   |
| 7. For purposes of Appeal, the proposed amendment explanation of how the new or amended claims we   |   |   | and an   |
| The status of the claim(s) is (or will be) as follows:  |   |   |  |
| Claim(s) allowed:   |   |   |  |
| Claim(s) objected to:   |   |   |  |
| Claim(s) rejected:  |   |   |  |
| Claim(s) withdrawn from consideration:  |   |   |  |
| 8. The drawing correction filed on is a) app  | roved or b) disapproved by  | the Examiner.   |  |
| 9. Note the attached Information Disclosure Statemen  | nt(s)( PTO-1449) Paper No(s)  |   |  |
| 10. Other:  |   |   |  |
|   |   |   |  |

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The Request for Reconsideration dated 10/27/03 has been considered but has not been deemed persuasive for the following reasons:

## Withdrawn portions

Applicant first argues that the terms "first major surface" and "opposite major surface" mean the bottom and top surfaces of the glass ribbon and are not new matter (p.2 3<sup>rd</sup> paragraph).

The examiner agrees and will withdraw this portion of the rejection.

Applicant next argues that one skilled in the art would know the diffusion of tin in the presently claimed glass float ribbon is inherent and cites two references (pp.2-3).

The examiner agrees and will withdraw this portion of the rejection.

Applicant next argues that the term "annealing ... in air" is not new matter and cites Figure 1 (pp.6-7).

The examiner agrees and will withdraw this portion of the rejection.

Applicant next argues that several phrases are not new matter as they are conventional aspects of float glass processes (pp.7-8).

The examiner agrees and will withdraw this portion of the rejection.

Applicant next argues that the thickness of 1300 A is supported in Example 5 of Table 1 (p.8).

The examiner agrees and will withdraw this portion of the rejection.

Applicant next argues that the "glass sheet" is not deemed new matter that a continuous glass ribbon is in fact a glass sheet (p.9).

The examiner agrees and will withdraw this portion of the rejection.

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Also, the 112 2<sup>nd</sup> paragraph rejection is withdrawn in light of the applicant's explanation on pp.9-10.

## Maintained portions

Applicant next argues that the titanium dioxide is in the crystalline phase as supported by the McCurdy Declaration (pp.3-5). In addition, applicant next argues that the term "photocatalytically-activated self-cleaning coating" is not new matter and relies on a series of experiments in the McCurdy Declaration (pp.5-6). Additionally, applicant next argues that the cleaning reaction rates are not new matter as they are merely calculated from the samples of Example 1 as demonstrated in the McCurdy Declaration (p.9).

The McCurdy Declaration states that experimentation was conducted (paragraph 6) by coating float glass with titanium oxide in accordance with claim 1 (paragraph 7). The results were analyzed for crystallinity (paragraph 8), self-cleaning (paragraph 9), and photocatalytic activity (paragraphs 10-11). In addition, from these results, a reaction rate was calculated (paragraph 12).

As mentioned in the previous office action, it should be noted that there were variations (albeit deemed minor by the applicant in line 3) and this may result in the claimed characteristics. Applicant has not rebutted the examiner's position. Regardless, the applicant has not utilized the same line speed or the use of a silica coating as that or the original specification and hence, may have produced different results. There is no conclusive evidence that these did not produce the claimed characteristics. It should be noted that nowhere in the McCurdy application is there any mention that the above parameters would not indeed influence the claimed properties.

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Assuming that it could be established that the claimed characteristics would be inherent to the claimed process, it is noted that the claims as presently written do not recite these limitations. Applicant would need to include these specific parameters in order for the new matter rejection to be withdrawn. It is noted that applicant will only have established that this specific example produced a self-cleaning product and it is only proper to use such a phrase to be descriptive of the specific example. There is no indication in this application that at the time of filing that the applicant was in possession of the general concept of producing a self-cleaning surface. Therefore, using the expression of self-cleaning other than as a characteristic of this very specific example would constitute new matter.

Again, as previously mentioned in the previous office action, the applicant has merely mentioned substrate transportation technique, a silica coating, specific precursors and carrier gas, substrate and precursor temperature, line speed, mixture, mixer, and volume percent composition. There is no mention of the annealing properties including rate, temperature, atmosphere, heating source nor is there any mention of substrate purity, substrate crystallinity, processing pressure, precursor purity – any or all of which can account for the claimed characteristics. MPEP 2163.07 (a) states that to establish inherency, the extrinsic evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient. *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999).

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Applicant next argues that the term "dimensionally stable" simply refers to the glass float ribbon having dimensions (thickness and width) which are stable as a result of a ribbon cooling and is conventional to a float glass process and thus not new matter (p.7).

The examiner disagrees. It is first noted that nowhere in the original specification is there any mention of such a limitation. It should also be noted that nowhere in the cited references is there mention of same. Applicant has not established that it is conventional that the glass would be dimensionally stable upon cooling.

Applicant next argues that "said silica layer inhibits migration of sodium ions is not new matter and cites US Patent 6,265,076 and a textbook (p.8).

It is first noted that US Patent 6,265, 076 states that "barrier layers may be utilized to prevent the migration of alkali metal ions from the glass substrate into the film" and that "the barrier layer is ... about 100-200 angstroms thick" (col.3 lines 30-37). The textbook reads that "a 200 A thick silica film is ... sufficient to prevent ... most of the alkali ions at the glass surface from migrating into a ... deposited TiO<sub>2</sub> film (p.109).

It should be noted that nowhere in the instant claim is there any recitation of a glass substrate. Hence, there is no reason for the skilled artisan to believe that a barrier layer could prevent migration of sodium ions from any article of manufacture. Furthermore, the applicant requires a thickness of 339 angstroms. There is no mention that the barrier properties would still exist at that thickness. Hence, the arguments are not commensurate in scope with the claims as presently written.

Applicant's arguments have been considered but are not deemed persuasive.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to B. Chen whose telephone number is (571) 272-1417. The examiner can normally be reached on 7:30am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck can be reached on (571) 272-1415. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Bc 1/16/04

> BRET CHEN PRIMARY EXAMINER